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New York City Board of Education, Brooklyn, N.Y.

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\*Effective Reading Programs; Right to Read

#### ABSTRACT

This program, included in "Effective Reading Programs...," annually serves about 4000 disadvantaged students in grades nine through twelve in 50 high schools. Many of the students are black or Spanish-speaking and come from low-income homes in the inner city. The program, begun in 1969, is designed to provide individualized tutoring in reading and math by high school students to other high school students. Students are invited into the program through announcements, bulletin boards, and teacher recommendations. They are tested when they initially come for tutoring and, on the average, entering students are four to six years behind grade level in reading and math. The tutors, working with one or two students at a time, assist in vocabulary development, oral reading, comprehension, and math skills. The remedial teachers in many schools serve as informal consultants for tutoring techniques and materials. However, tutors primarily work under the supervision of master teachers and coordinators. A monthly newsletter is sent to all schools, and workshops in reading and math are held for small groups of master teachers to keep them well informed. (TO/AIR)

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BOARD OF EDUCATION OF THE CITY OF NEW YORK OFFICE OF STATE & FEDERALLY-ASSISTED PROGRAMS HIGH SCHOOL PEER TUTORING (HOMEWORK HELPERS) PROGRAM 141 Livingston Street, Brooklyn, New York 11201

Fact Sheet High School Peer Tutoring (Homework Helpers) Program . 1974-1975

#### Program Overview

The High School Peer Tutoring (Homework Helper) Program features the training and employment of indigenous high school and college youngsters to serve as tutors for high school youth who live in the disadvantaged areas of New York City. The Peer Tutoring (Homework Helper) Program was developed by the Board of Education and Mobilization for Youth, Inc. during the 1962-63 school year. Research reports regarding the program's impact indicate that participants have made very significant educational progress. The Program has been described by the United States Office of Education as an exemplary program, worthy of replication by school districts throughout the country. It has, in fact, become the model for many similar programs during - the last ten years.

During the years 1963 through 1969 the Homework Helper Program was developed, on a decentralized district basis, in ten local school districts. Over 100 Homework Helper Centers were developed in elementary and secondary schools throughout the city. These programs, servicing approximately 1200 tutors and 3500 pupils, were developed in cooperation with the Board of Education's Tutorial Assistance Program under the direction of Dr. Albert R. Deering who served as Citywide Program Coordinator under the supervision of Dr. Seelig L. Lester, Deputy Superintendent of Schools.

The High School Homework Helper Program became a separate entity during the 1969-70 school year when 23 high school Homework Helper Centers were in operation. The program was expanded into 48 high schools during 1970-71, 53 during 1971-72 and further expanded into 73 high school centers during the 1972-73 school year. The 1974-75 program employs approximately 1000 college and high school tutors who will provide tutorial assistance to over 5,000 high school students during the current year.

The High School Peer Tutoring (Homework Helper) Program also operate during the summer months. Seventeen Homework Helper Centers were in operation during the summer of 1970 while nineteen were in operation during the summers of 1971, 1972 and 1973. The summer program is similar to the year-round program except that it operates during the morning hours in the summer while the year-round program is basically an after school operation.

#### Aims of the Program

A. To provide tutorial service to high school youths in an effort to improve academic skill of participating students in the area of mathematics, reading and English as a second language.



# HIGH SCHOOL PEER TUTORING (HOMEWORK HELPERS) PROGRAM

#### Fact Sheet

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- B. To provide tutorial service in order to improve the study skills and work habits of participating students so that participating students will be able to satisfactorily complete homework assignments.
- C. To provide tutorial service in order to improve the attitude of participants toward school and school related activities.
- D. To provide academic models for participants in order to increase the educational aspirations of participating students.

#### III. Structure of the Program

The program operates under the direction of Dr. Albert R. Deering who has been coordinator of the program since its inception. Dr. Deering is assisted by Mr. Robert Mangieri, Assistant Obordinator and ten per session general assistants who visit centers on a regular basis.

Each Peer Tutoring (Homework Helper) Center consists of a teacher-in-charge or Master Teacher, one adult paraprofessional, and a corps of approximately 15 college and high school tutors. Tutoring takes place on Monday, Tuesday, Wednesday, and Thursday. Students generally attend two days a week (Mon.-Wed. or Tues.-Thurs.) Each session lasts for two hours.

Tutors participate in an orientation program prior to the onset of tutorial activities. Ongoing tutor training activities include tutor-training sessions held once a month on Friday afternoons and daily observation and conferences conducted by the Master Teacher. Teachers and adult paraprofessionals participate in an orientation program as well as in monthly staff conferences conducted by the general assistants.

Tutors are paid from \$2.00 to \$5.47 per hour depending upon their academic credit standing and experience in the program. In addition to instructional materials available in each school the program's budget provides for the purchase of supplementary materials as needed. The attendance of participating tutors was approximately 95% while the attendance of participating students was approximately 85% during the 1973-74 school year.

#### IV. Evaluations and Research Reports

A. Available from the N.Y.C. Board of Education.
(Write to High School Peer Tutoring (Homework Helpers) Program
Board of Education
141 Livingston Street
Brooklyn, New York 11201)



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  Published by the U.S. Office of Education,
  Division of Compensatory Education, 1970.
- 2. Program Conspectus Homework Helper Program
  Published by the Center for Urban Education, 1969.
- 3. An Evaluation of the District Nine Homework Helper Program Published by Fordham University, 1969.
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- 6. <u>High School Centers for Homework Helpers</u>.

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- 7. Final Report of the Evaluation of the 1969-70 Homework Helper Program.
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  Published by the Human Affairs Research Center, 1971.
- 12. <u>High School Homework Helper Program, 1971-72</u>
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  Published by the Teaching and Learning Corporation, 1972.
- 14. An evaluation of the High School Homework Helper Program, 1972-1973
  Published by the Institute for Educational Development, 1973.
- 15. Homework Helper Program Summer 1973
  Dr. Eugene Loveless September, 1973



## HIGH SCHOOL PEER TUTORING (HOMEWORK HELPERS) PROGRAM

# Fact Sheet

- 16. <u>High School Homework Helpers Evaluation Period 1973-1974</u>
  Dr. Gary E. Price
- 17. High School Homework Helpers Summer 1974
  Dr. William A. Kinder
  - B. Available from Other Sources:
- 1. "Studies in Tutoring" by Robert A. Cloward
  Published in The Journal of Experimental Education,
  Fall 1967, pp 14-25
- 2. "The Development of the Mobilisation for Youth Homswork Helper Program: A Case Study" by Albert R. Deering, available from <u>Dissertation Abstracts</u>. 1967, Vol. 27.

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Function No. 17-46411

#### HIGH SCHOOL HOMEWORK HELPERS

Evaluation Period
1973-74

Gary E. Price

An evaluation of a New York City school district educational project funded by the New York State Urban Education Program enacted at the 1970 legislative Session of the New York State legislature for the purpose of "meeting special educational needs associated with poverty". (Education Law 3602, subdivision 11 as amended.) Performed for the Board of Education of the City of New York for the 1973-1974 school year.

Dr. Anthony J. Polemeni, Acting Director



BOARD OF EDUCATION OF THE CITY OF NEW YORK OFFICE OF EDUCATIONAL EVALUATION 110 LIVINGSTON STREET, BROOKLYN, N. Y. 11201

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### Introduction

High School Homework Helpers is a program designed to provide tutoring in reading and math by high school students to other high school students. The program was offered in seventy-three New York City high schools serving disadvantaged students. Each center had one master teacher, one educational assistant (an adult paraprofessional), and usually one educational aid (usually a college student) and the equivalent of ten to fifteen tutors. The program was offered before and after school four days per week with a total of two hours per day. Additionally, some schools used the tutors by sending them into remedial classrooms to give additional individualized assistance in reading and math. The tutors would assist in vocabulary development, reading aloud, comprehension and math skills. Many times SRA reading materials and math worksheets would be used to assist the tutors in working with the tutees.

More than 4000 students received tutoring in reading and/or math through the program.

The statistical analysis was based on all students who had been pre and posttested and who had received at least eight hours of tutoring in a month and who had been tutored for at least two months.

This program provided an approximate total of 219,000 hours of individualized tutoring if it operated at least twenty-five weeks in the academic year. The program was implemented as described in the original proposal. There was very little cross reference to other programs. However, in many schools the remedial teachers in reading and math served as informal consultants for tutoring techniques and appropriate materials.

# Characteristics of the population served

Students were invited to the program through announcements, bulletin boards and teacher recommendations. Students were initially tested in reading and/or math when they started coming for tutoring. Overall, the average grade level of the students tutored in reading was 10.31 and these students had a pretest average reading grade equivalent score of 4.95. On the average they received 3.9 months of tutoring or a minimum of 31.2 hours of tutoring. For those students pretested on the Stanford in Math Computation the average grade level was 10.07 and the average grade



equivalent score on the pretest was 5.96. On the average these students received 3.02 months of tutoring or a minimum of 24.16 hours to tutoring. For those students pretested on the Stanford in Math Concepts the average grade level was 10.07 and the average grade equivalent score on the pretest was 6.53. On the average these students received 3.07 months of tutoring or a minimum of 24.56 hours of tutoring.

Thus, all of the students, on the average, were four to six years behind their grade level in reading and/or math.

## **Program Objectives**

- 1. As a result of participation in the High School Homework Helpers Program, the reading grade equivalent score of the students involved in the reading component will show a statistically significant difference between the actual posttest score and the predicted posttest score.
- 2. As a result of participation in the High School Homework Helpers Program, the mathematics computation grade equivalent score of the students involved in the mathematics component will show a statistically significant difference between the actual posttest score and the predicted posttest score.
- 3. As a result of participation in the High School Homework Helpers Program, the mathematics concepts grade equivalent score of the students involved in the mathematics component will show a statistically significant difference between the actual posttest score and the predicted posttest score.

# **Evaluation Objectives**

- 1. To determine whether as a result of participation in the program the reading grade equivalent score will show a statistically significant difference between the actual posttest score and the predicted posttest score.
- 2. To determine whether as a result of participation in the program the mathematics computation grade equivalent score will show a statistically significant difference between the actual posttest score and the predicted posttest score.
- 3. To determine whether as a result of participation in the program the mathematics concepts grade equivalent score will show a statistically significant difference between the actual postest score and the predicted posttest score.



## **Evaluation Results**

The program was implemented as outlined in the project description. Statistically significant gains were made for all of the evaluation objectives. Students gained an average of 7.8 months in reading after receiving an average of 3.91 months of tutoring, students gained an average of 8.6 months in math computation after receiving an average 3.02 months of tutoring and students gained an average of 7.9 months in math concepts after receiving an average of 3.07 months of tutoring. All of the gains were statistically significant at the .001 level using the historical regression analysis to analyze the data (all of the results are indicated on question 30A on the attached MIR form).

## Additional Information

Some of the outstanding features of the program include: (1) The outstanding organization and communication structure between the seventy-three schools set up by the director and assistant director; (2) Site visits were made by the assistant director and the coordinators. Each coordinator is a licensed teacher and is responsible for eight to ten schools. Each school is visited approximately every two months to check on program implementation and to provide information and suggestions for using materials and program operation.

Several meetings were held between the evaluator and the director(s) of the program. A newsletter was sent out from the central office to all schools on a monthly basis so that master teachers could be better informed. Additionally, a workshop was organized in reading and math for small groups of master teachers. Communication, tests, resource materials and sample forms are ordered and distributed to all schools from the central office.

It is interesting to note that greater gains were made in math concepts when compared to math computations. This could be a result of students being tutored in reading and, therefore, increasing their ability to solve word problems.

The rationale behind pretesting is understandable but presents problems in this type of program. Many students who need tutoring and who are 4 to 6 years behind their grade level are "turned off" by school



4.

and testing and may find it very difficult to "ask for" tutoring. The problem is compounded by testing them as soon as they come for tutoring.

Many of the high schools are on a split session where lunch is not served. When the school day is extended by two hours for those students coming for tutoring it would be helpful if some cookies and juice could be available. Additionally, refreshments would serve as an additional incentive for those students who need tutoring. The value of providing snacks should be evaluated individually in each high school.

A major difficulty resulted from the initiation of a new procedure for paying tutors. All of the processing of papers by the Office of Personnel had to be completed before tutors could begin their work. After completed papers were in, it took a minimum of six weeks before payment was received. Many of the students who started tutoring in November were not paid till January and February. Some of the tutors had graduated before receiving their pay. This problem was, in no way, the fault of the directors of High School Homework Helpers but it did have a serious effect on the morale of the tutors.

Each of the high schools were statistically analyzed using the historical regression analysis procedures in reading, math computations and math concepts. This information was requested by the director so he could use this information to make decisions for continuation of the program in each high school. There is always a greater demand by other high schools for the program than there are monies and staff to satisfy the need.

## Recommendations

- 1. That the program be continued because of the tremendous impact of the tutoring services that were offered to high school students in reading and math. Statistically significant results were found in all of the evaluation objectives.
- 2. That additional workshops be offered early in the academic year for the master teachers. These could be organized by borough and include demonstration of tutoring resources by level of retardation in reading and math.



- 3. The procedures established by the Personnel Division for paying tutors be reviewed so that tutors can be paid close to the date they provide the tutoring.
- 4. Different tests or different levels of the same test be used in different high schools. The content areas within reading and math may not be the same in vocational high schools as in academic high schools.
- 5. The Nelson Denny reading test be replaced by a reading test designed for diagnostic testing rather than a global measure in reading.
- 6. An opportunity should be provided for master teachers to dialogue with each other as to how they implement the program in selection and assignment of tutors, tutee recruitment, filing of materials, record keeping, communication with teachers, etc.
- 7. The rationale for discontinuing the snacks should be reevaluated. Many master teachers found snacks to be worthwhile and other master teachers felt they were not necessary.

#### Conclusions

Overall, the High School Homework Helpers provided an outstanding program of tutoring in math and reading to over four thousand students in seventy-three high schools in New York City. Significant gains were made for all of the evaluation objectives. This program provides a significant service for many students and should be continued and increased where possible.



Use Table 30A. for Historical Regression Design (6-Step Formula) for Reading (English); Math (English); Reading (Non-English); Math (Non-English).

Selected Evaluation Procedures, p. 45-49). Before completing this table, read all footnotes. Attach additional In the Table below, enter the requested information about the tests used to evaluate the effectiveness of major in the form of grade equivalent units as processed by the 6 step formula (see District Evaluator's Handbook of project components/activities in achieving desired objectives. This form requires means obtained from scores Function number 17-46411, High School Homework Helpers 1973-74 Standardized Test Results. sheets if necessary. 30A.

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Where several grades are combined, enter Identify the participants by specific grade level (e.g., grade 3, grade 5).

he last two digits of the component code.

4/ Jotal number of participants included in the pre and posttest calculations. 2/ Specify level of statistical significance obtained (e.g., p < .05; p < .01).

### 31. EXEMPLARY PRC RAM ABSTRACT:

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Component Code	Activity Code	Objective Code		
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#### Component Abstract

High School Homework Helpers is a program designed to provide tutoring in reading and math by high school students to other high school students. The program was offered approximately to 4,000 students in seventy-three New York City high schools serving disadvantaged students. Each center had one master teacher, one educational assistant (an au it paraprofessional), and usually one educational aid (usually a college student) and the equivalent of ten to fifteen tutors. The program was offered before and after school two hours per day for four days per week. Additionally, some schools used the tutors by sending them into remedial classrooms to give additional individualized assistance in reading and math.

The statistical analysis was based on all students who had been pre and posttested and who had received at least eight hours of tutoring in a month and who had been tutored for at least two months. The average grade level of students tutored in reading was 10.3 with a pretest average grade equivalent score of 4.95. On the average these students received 3.9 months or 31.2 hours of tutoring. For those students pretested on the Stanford Math Computation the average grade level was 10.07 and the average grade equivalent score was 5.96. For those students pretested on the Stanford Math concepts the average grade was 10.07 and the average grade equivalent score was 6.53. The students received an average of 3.07 months or 24.56 hours of tutoring.

Statistically significant gains were made at the .001 level by the students in each of the tested areas in reading and math as measured by the historical regression analysis. Students gained an average of 7.8 months in reading, 8.6 months in math computation and an average of 7.9 months in math concepts.

The program was outstanding in many ways. This included an effective method for communication and an organized method for tutor training, record



keeping, tutor and tutee recruitment, etc. Also, of great value was the effectiveness in which students could help other students learn in the areas of reading and math. Overall, this program is outstanding and very effective in achieving its objectives.

